ELSEVIER

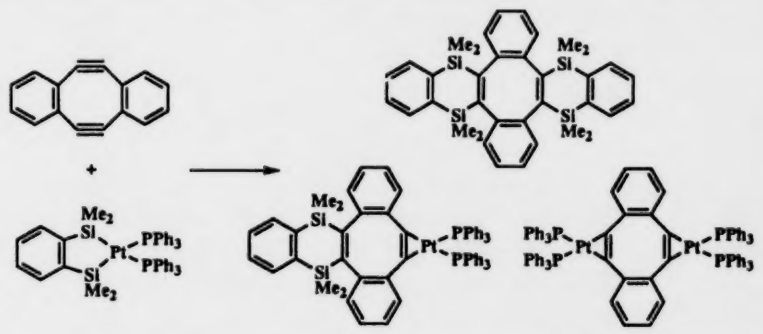
Volume 265, Numbers 1–2, 15 November 1997

Inorganica Chimica Acta

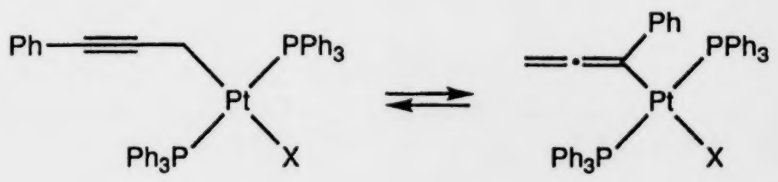
Contents

Articles

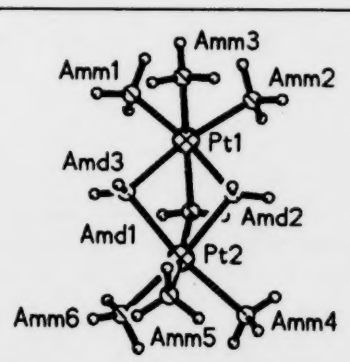
Reactions of 5,6,11,12-tetradehydrodibenzo[*a*,*e*]cyclooctene with 1,2-$C_6H_4(SiMe_2)_2Pt(PPh_3)_2$ and $Pt(CH_2{=}CH_2)(PPh_3)_2$. X-ray structure determination of resulting double silylated compounds and platinum–alkyne complexes 1
S. Shimada, M. Tanaka, K. Honda



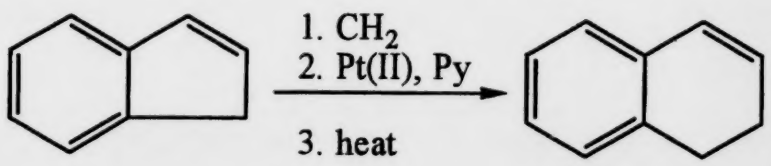
Mechanistic studies on mutual isomerization of propargyl- and allenylplatinum(II) complexes 9
S. Ogoshi, Y. Fukunishi, K. Tsutsumi, H. Kurosawa



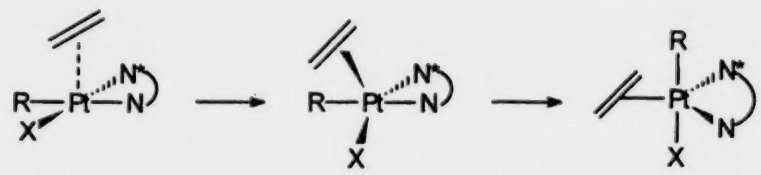
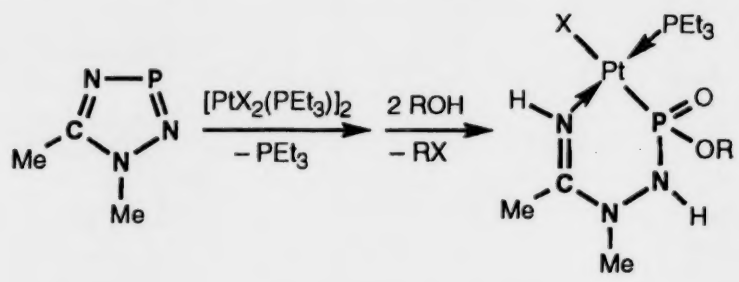
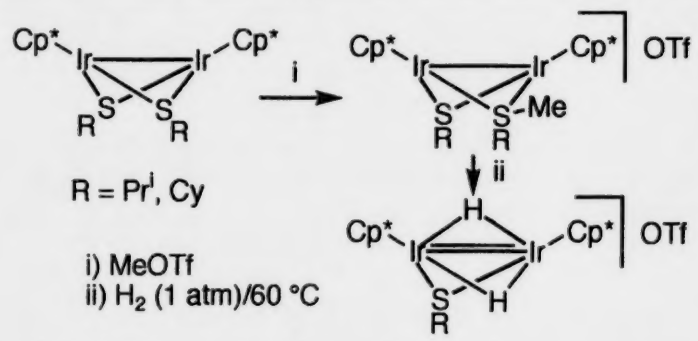
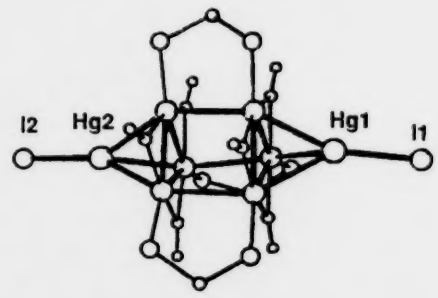
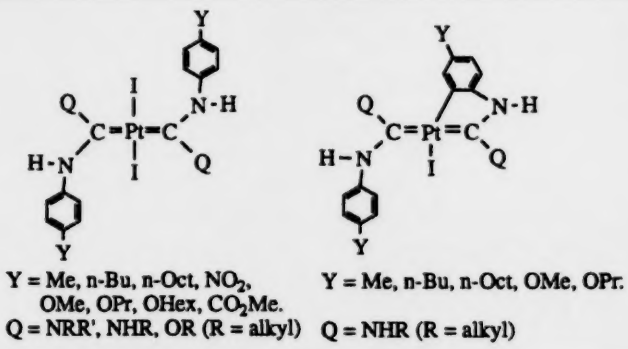
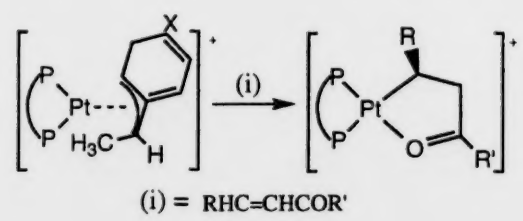
The tri-μ-amido-bis[triammineplatinum(IV)] cation: preparation, structure and acidity 17
W. Frank, L. Heck, S. Müller-Becker, T. Raber



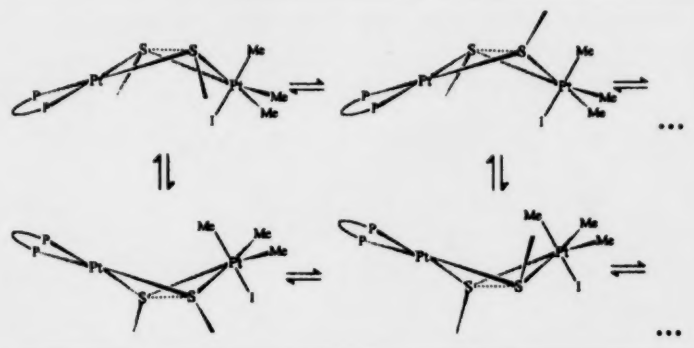
Chemoselectivity in cycloalkene–cycloalkene transformations via platina(IV)cyclobutane derivatives 23
B. Williams, P.W. Jennings



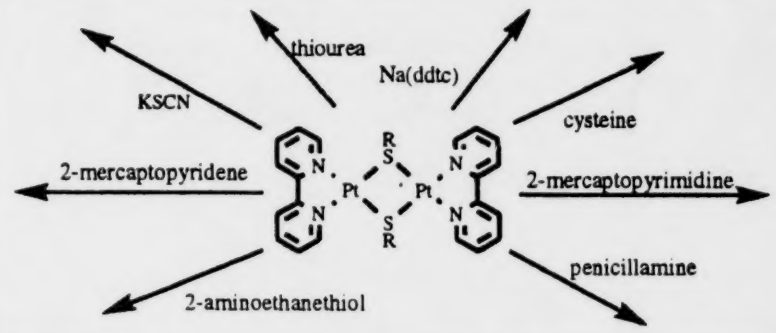
Elsevier Science S.A.

Molecular rearrangements in the formation of five-coordinate platinum(II) olefin complexes. Structural and mechanistic aspects ..... V.G. Albano, M. Monari, I. Orabona, F. Ruffo, A. Vitagliano	35	
^{1}H, ^{31}P and ^{195}Pt NMR characterization, and X-ray molecular structures of five- and six-membered platinum(II) and palladium(II) metallacycles from the alcoholysis of di- and triazaphosphole complexes ..... J.G. Kraaijkamp, D.M. Grove, G. van Koten, J.M. Ernsting, A. Schmidpeter, K. Goubitz, C.H. Stam, H. Schenk	47	
Synthesis of diiridium complexes containing bridging thiolate and thioether ligands $[(\eta^5\text{-}C_5Me_5)Ir(\mu\text{-}SR)(\mu\text{-}MeSR)Ir(\eta^5\text{-}C_5Me_5)][OSO_2CF_3]$ (R = Pr^i, cyclohexyl) and their reactivities toward CO and H_2 ..... M. Nishio, Y. Mizobe, H. Matsuzaka, M. Hidai	59	
The bicluster oxidative addition as a route to bicapped hexaplatinum clusters ..... L. Hao, L. Manojlovic-Muir, K.W. Muir, R.J. Puddephatt, G.J. Spivak, J.J. Vittal, D. Yufit	65	
Neutral bis(carbene)platinum(II) complexes ..... S.-W. Zhang, R. Ishii, F. Motoori, T. Tanaka, Y. Takai, M. Sawada, S. Takahashi	75	
Platinum(II) diphosphine complexes containing cyclic ligands with Pt–C and Pt–O bonds ..... G.S. Mhinzi, L.E. Crascall, J.L. Spencer	83	

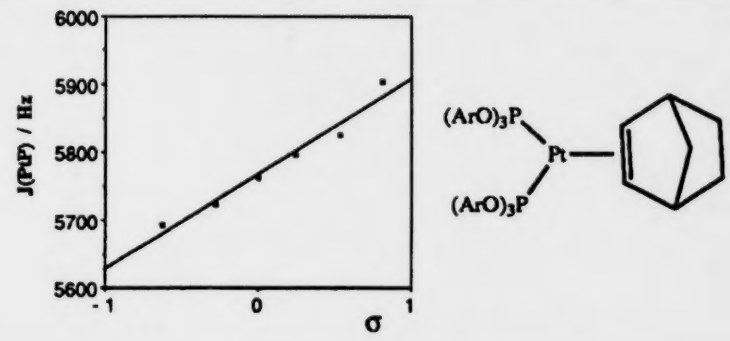
Theoretical, structural and NMR studies of fluxionality in thiolato-bridged platinum(II)–platinum(IV) dinuclear complexes 89
N. Duran, P. González-Duarte, A. Lledós, T. Parella, J. Sola, G. Ujaque, W. Clegg, K.A. Fraser



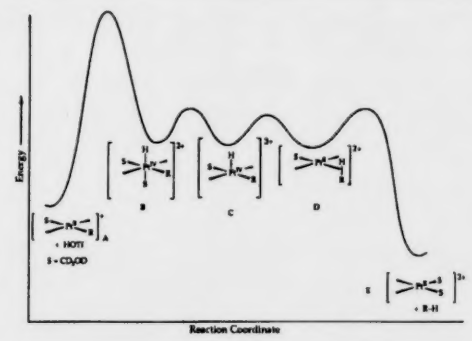
Reactivity of rescue agents for cisplatin induced nephrotoxicity with $Pt_2(2,2'\text{-bipyridine})_2(\mu\text{-}N\text{-acetyl-L-cysteinato-}S)_2$ 103
K.A. Mitchell, C.M. Jensen



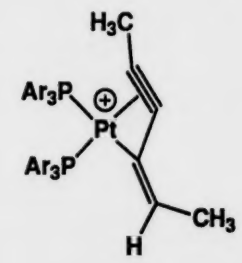
Probing the bonding of phosphines and phosphites to platinum by NMR. Correlations of $^1J(PtP)$ and Hammett substituent constants for phosphites and phosphines coordinated to platinum(II) and platinum(0) 107
C.J. Cobley, P.G. Pringle



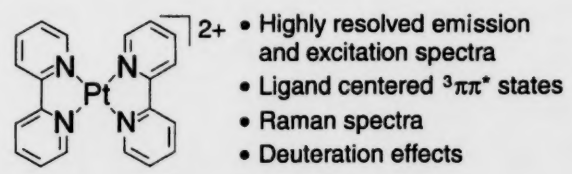
Ligand effects on the rates of protonolysis and isotopic exchange for platinum(II) alkyls 117
M.W. Holtcamp, J.A. Labinger, J.E. Bercaw

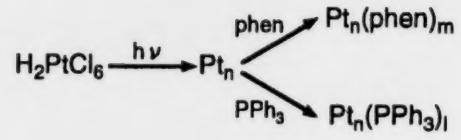
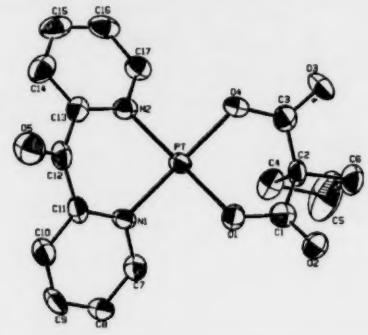
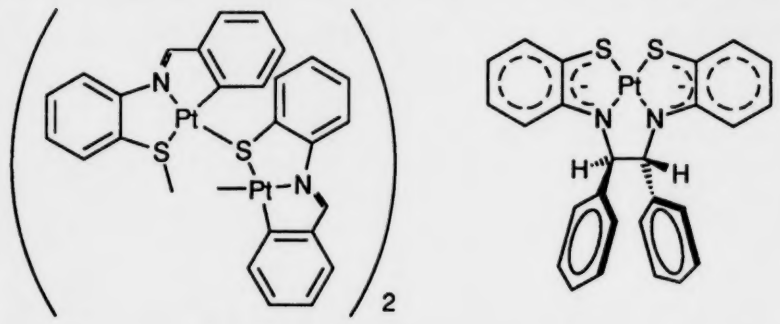
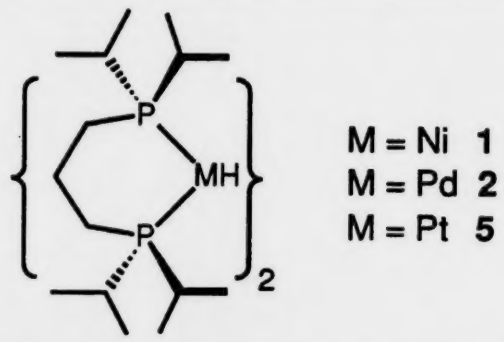
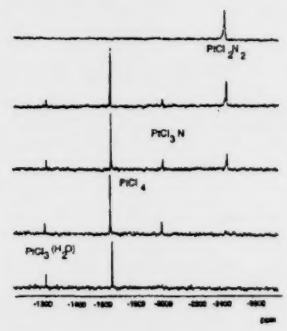
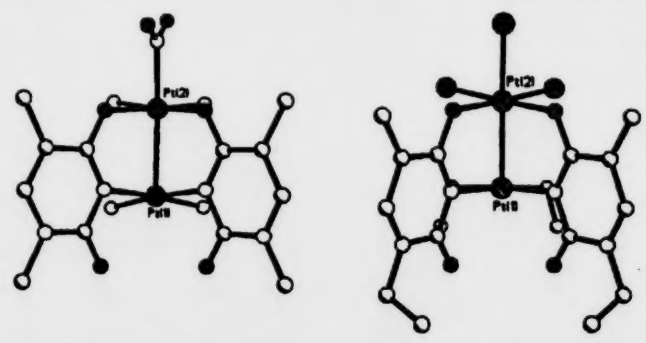


Formation of platinum allyl and propargyl complexes from protonation of platinum enyne and diyne complexes 127
C.P. Casey, S. Chung, Y. Ha, D.R. Powell

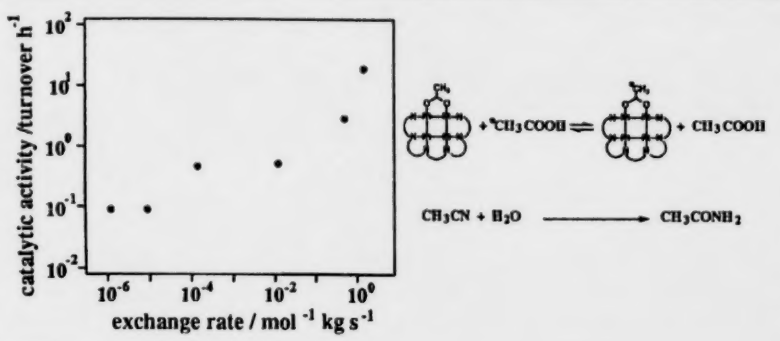


Ligand-centered $^3\pi\pi^*$ emission and Raman activity of $[Pt(bpy\text{-}h_8)_n(bpy\text{-}d_8)_{2-n}]^{2+}$ $(n=0, 1, 2)$ 139
W. Humbs, H. Yersin

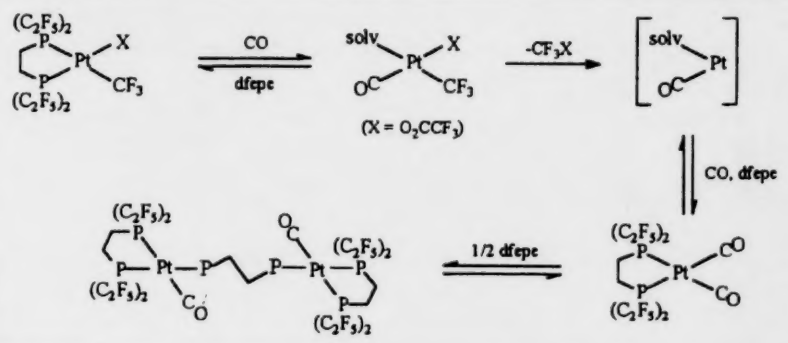


Giant platinum clusters with organic ligands: preparation and catalysis ..... 149 N. Toshima, K. Nakata, H. Kitoh	
Novel carboplatin analogs containing flexible and potentially intercalating ligands: preparation and X-ray crystal structures of di-2-pyridyl ketone cyclobutanedicarboxylate platinum(II) and of 2,3-bis(2-pyridyl)pyrazine cyclobutane dicarboxylate platinum(II) ..... 155 A.D.Q. Ferreira, A. Bino, D. Gibson	
Synthesis and characterization of the platinum complexes with N,S or C,N,S ligands derived from 2-phenylbenzothiazoline ..... 163 T. Kawamoto, I. Nagasawa, H. Kuma, Y. Kushi	
Synthesis and structure of nickel(I) and platinum(I) hydride dimers having identical ancillary ligands ..... 169 M.D. Fryzuk, G.K.B. Clentsmith, D.B. Leznoff, S.J. Rettig, S.J. Geib	
Outer and inner coordination sphere chemistry of polyazacyclophane platinum(II) complexes. Crystal structure of $[PtBr_4]_2(H_4L1)\cdot H_2O$ (L1 = 2,6,9,13-tetraaza[14]paracyclophane) ..... 179 E. García-España, J. Latorre, V. Marcelino, J.A. Ramírez, S.V. Luis, J.F. Miravet, M. Querol	
+3 Oxidation state of platinum in dinuclear complexes with thymine nucleobases: structural and solution studies ..... 187 M. Peilert, S. Weißbach, E. Freisinger, V.I. Korsunsky, B. Lippert	

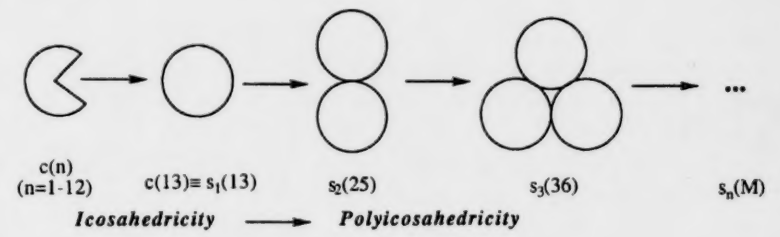
Synthesis and property of pentakis(μ-acetato-O,O')(linear-hexamine)tetraplatinum(II), $[Pt_4(\mu\text{-acetato-}O,O')_5(L)]^{3+}$; correlation between rate of in-plane acetate ligand exchange and catalytic activity for hydration of acetonitrile 197
A. Shibata, T. Yamaguchi, T. Ito



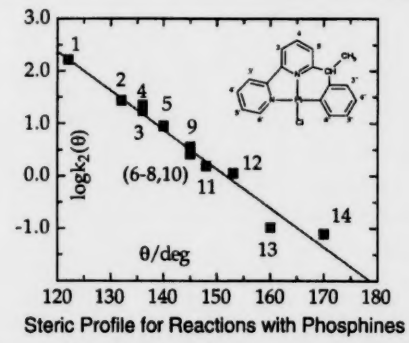
Thermal elimination reactions of (dfepe)Pt(CF_3)X (fluoroalkyl)phosphine complexes (X = Cl, O_2CCF_3): synthesis and structural characterization of an unusual chelate-bridged platinum(0) complex, [(dfepe)Pt(CO)]$_2$(μ-dfepe) 205
R.G. Peters, B.L. Bennett, D.M. Roddick



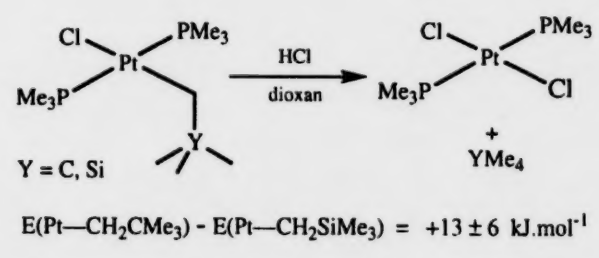
Stereochemical and electronic evidence of icosahedricity and polyicosahedricity 213
H. Zhang, B.K. Teo



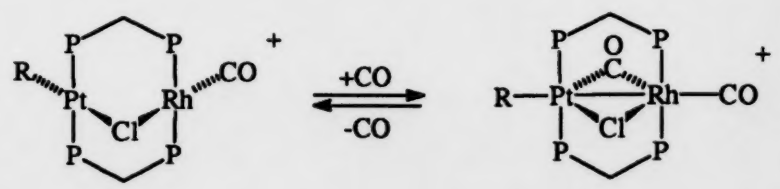
Reactivity of tertiary phosphines toward a cyclometallated platinum(II) complex: evaluation of steric and electronic contributions 225
R. Romeo, M.R. Plutino, L. Monsù Scolaro, S. Stoccoro

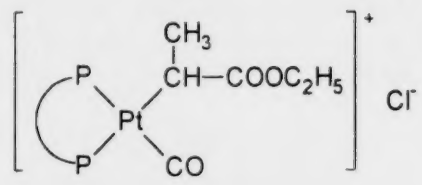
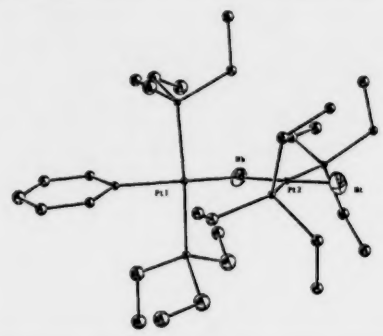


Relative metal–carbon bond enthalpies and *trans*-influences for neopentylplatinum(II) and trimethylsilylmethylplatinum(II) complexes: an unusual case of weaker M–C binding by a β-silylmethyl ligand than its carbon analogue 235
R. Kapadia, J.B. Pedley, G.B. Young

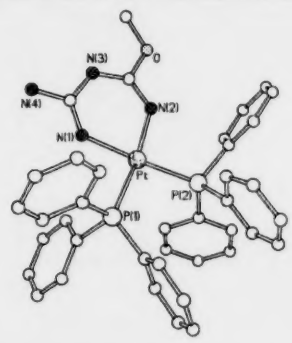
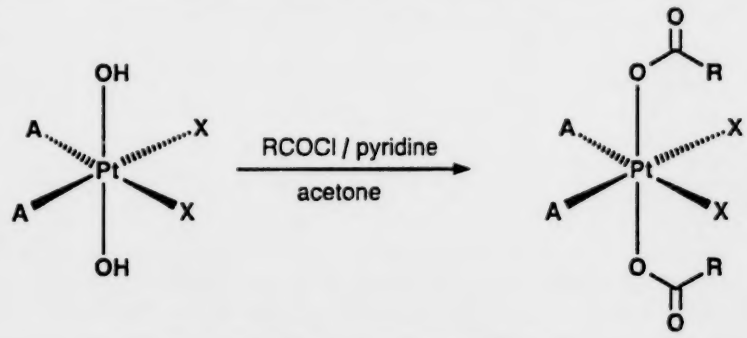
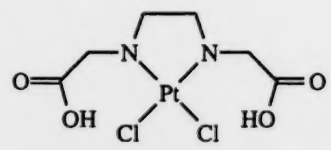


Synthesis and structures of dppm-bridged platinum–rhodium complexes 241
C. Xu, G.K. Anderson, N.P. Rath

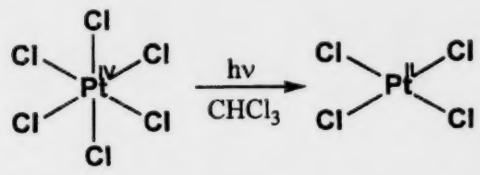


High-pressure NMR investigation of the intermediates of platinum–phosphine hydroformylation catalysts..... 249 T. Kégl, L. Kollár, L. Radics	
Synthetic and reactivity studies of some asymmetric dinuclear platinum(II) monohydrido-bridged cations. The neutron diffraction structure of $[(PEt_3)_2(Ph)Pt(\mu\text{-}H)PtH(PEt_3)_2][BPh_4]$ ..... 255 A. Albinati, G. Bracher, D. Carmona, J.H.P. Jans, W.T. Klooster, T.F. Koetzle, A. Macchioni, J.S. Ricci, R. Thouvenot, L.M. Venanzi	

Notes

Bifunctional activation of cyanoguanidine. Synthesis and molecular structure of the azametallacycle *cis*-$[(PPh_3)_2\overline{Pt\{NHC(OMe)=NC(NH_2)=NH\}}][BPh_4]$ ..... 267 M.F.C. Guedes da Silva, C.M.P. Ferreira, E.M.P.R.P. Branco, J.J.R. Fraústo da Silva, A.J.L. Pombeiro, R.A. Michelin, U. Belluco, R. Bertani, M. Mozzon, G. Bombieri, F. Benetollo, V.Yu. Kukushkin	
Carboxylation of dihydroxoplatinum(IV) complexes with acyl chlorides. Crystal structures of the *trans-R,R-* and *trans-S,S*-isomer of (*OC*-6-33)-bis(1-adamantanecarboxylato)(cyclohexane-1,2-diamine)dichloroplatinum(IV) ..... 271 M. Galanski, B.K. Keppler	
Crystal structure of dichloro(ethylenediaminediacetic acid-*N,N'*)-platinum(II) ..... 275 M. Mullaney, S.-C. Chang, R.E. Norman	

A kinetic study of the photoreduction of hexachloroplatinate(IV) in chloroform 279
O. Monreal, T. Esmaeili, P.E. Hoggard



Conference Calendar 283
Author Index 285

The publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. A leaflet describing our requirements is available from the publisher upon request.